Clear-Com®
COMMUNICATION SYSTEMS

Encore™ Party-Line Communication Systems

Raising Performance

Clear, reliable, and proven party-line communication solutions

For over 35 years, Clear-Com® has led the industry with high performance party-line systems that allow work teams to establish well-coordinated communication and execution of their production plans. Professional production crews around the world choose Clear-Com for clear, instant, and reliable communication for a variety of production settings.

Clear-Com party-line intercom systems are widely used in live theatres, concert halls, and sport stadiums that host live events. They are also found in small to mid-sized TV/broadcast studios, smaller broadcast production trucks, industrial settings, houses of worship and in simulation applications.

With Clear-Com Encore™, one or more channels may be used in an installation to coordinate an event. All the technical staff running a high school play or small community theatre may talk together on one channel, while a larger production might have separate channels for stage manager, spot lights, props, sound, etc. The director will typically have a multi-channel intercom station allowing communications with people on any or all of the various channels.

For breadth, compatibility and scalability

Clear-Com® delivers the most comprehensive set of party-line intercom systems in the world. From main stations to remote stations, wall-mounted speaker stations to multi-channel belt packs, robust interfaces, headsets, announcer console, and more.

Based upon Clear-Com's market-proven communication technology, Clear-Com Encore™ delivers improved audio performance and offers a more streamlined, contemporary and user-intuitive design.

All components are constructed and proven to withstand rugged usage in fast-paced, demanding and high-intensity applications. Even under the most challenging conditions, the noise-attenuating headsets and noise-canceling microphones, combined with anti-sidetone circuitry, minimize acoustic noise and feedback to provide superior sound quality.

Clear-Com Encore is highly compatible with other Clear-Com or third-party components. This level of flexibility enables users to assemble the right system for their unique needs and easily scale to support the growing production environment.

2-Channel Main/Remote Stations

MS-702 Rack-Mount Main Station

Compact, feature-laden, single-rack-space intercom main station supports up to 60 headsets or 20 speaker stations on two intercom channels. Fail-safe power supply has separate short-circuit protection and auto-reset for each channel. Other features include: Channel A B linking; visual and audible call signaling; program input with individual channel level controls and program on/off/interrupt switches; remote mic kill switch, external relay circuit; and universal voltage power supply.

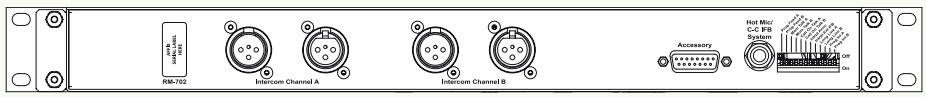
MS-702

MS-702 Rear Panel

RM-702 Remote Station

Single-rack-space, two-channel station is powered by the intercom line, and is ideal for mobile trucks, production studios, live venues, and TV facilities. Operator can talk and/or listen on either or both channels. Accepts line-level audio program input, with one channel programmable for interrupt. Microphone limiting and speaker "dipping" circuit for greater output before feedback.

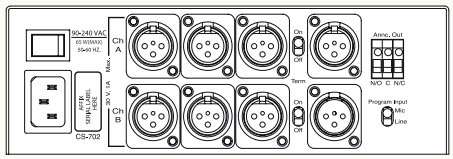
RM-702



RM-702 Rear Panel

CS-702 Portable Main Station

The CS-702 is a portable main station with a power supply, and a versatile intercom monitoring system. It supports two channels of intercom with up to 30 headset stations or 10 speaker stations, and features Clear-Com's excellent speech intelligibility in both high and low noise environments. CS-702 accepts mic or line-level audio program input, assignable to either or both channels, with interrupt switch to override program. Linking switch provides one-channel operation for rehearsals. Failsafe power supply provides short-circuit protection and automatic reset to restore system power.



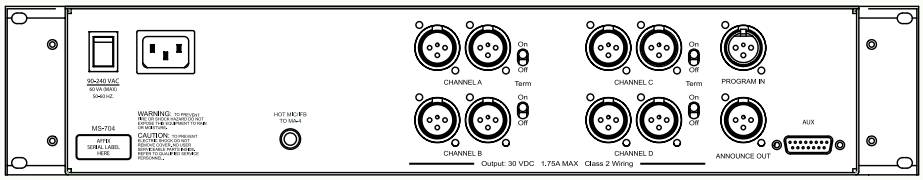
CS-702 Rear Panel

4-Channel Main/Remote Stations

MS-704 Rack-Mount Main Station

The MS-704 station provides four independent intercom channels, with programmable front-panel buttons for versatility. High-capacity, failsafe power supply supports up to 60 beltpacks or 20 speaker stations, each channel with individual short-circuit protection and auto-reset. Separate volume controls for each channel, and four separate audio program inputs. Three interruptible IFB channels for talent cueing, announce button/relay for paging, channel-linking button and remote mic kill switch.

MS-704

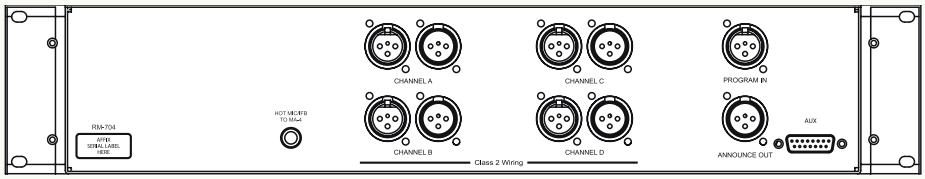


MS-704 Rear Panel

RM-704 Remote Station

Remote station provides four independent intercom channels, with programmable front-panel buttons for versatility. Separate volume controls for each channel, and four separate audio program inputs. Three interruptible IFB channels for talent cueing and announce button/relay for paging. Powered by the intercom line.

RM-704

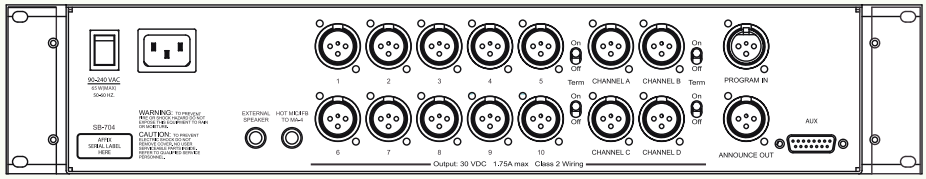


RM-704 Rear Panel

SB-704 Switchboard Main Station

SB-704 includes all of the features of the MS-704, with a 4 x 10 assignment matrix in place of the internal speaker (external speaker required). Up to 10 individual stations or groups of stations can be assigned to any one of the four main intercom stations or to a separate dedicated party line. Ten 3-pin XLR station inputs on rear panel, plus outputs and program inputs.

SB-704

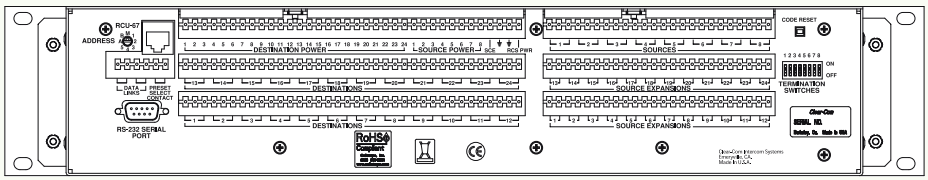


SB-704 Rear Panel

RCS-2700 + RCU-67 Programmable Source Assignment Panel

RCS-2700 + RCU-67 is ideal for medium to large installations where channel assignments to remote stations frequently change. 8 master channels ("sources") can be assigned to any 24 remote station "destinations", and additional RCS-2700 units can be connected for up to 15 sources and 72 destinations. It can store 14 presets, and is programmable using RCS-WIN software from a PC. 2-amp capacity. Latching magnetic relays. PC or RCU-67 connected with up to 300' (91m) of CAT-5 cable.

RCS-2700 + RCU-67



RCS-2700 Rear Panel

AMS-1027 Amplified Monitor Speaker

A self-contained, bi-amplified, monitor speaker that occupies only a single rack space. AMS-1027 provides convenient, powerful, high-quality audio monitoring capability in locations where few other monitor speakers can fit. It features magnetically shielded speakers. Exceptional audio quality with very low distortion, at high output power. The specially designed baffled speaker system will reach output levels of 96 dB SPL without audible distortion. Extended bass response; Separate volume and balance; user configurable to A/B volume controls for each channel. Balanced or unbalanced line-level XLR inputs; RCA-type inputs; XLR loop-through; front panel headphone jacks; built-in limiter; two adjustable LED bar-type VU meter displays.

AMS-1027

UL listed power supply.

MS-812A Twelve-Channel Programmable Intercom Master Station

Twelve-channel "intercom control center", with individual talk and listen buttons, and level control for each channel. With extensive microprocessor-based, menu-driven programming capabilities, set up the four "preset" buttons for different scenarios, for easy switching between events or rehearsal and performance.

LCD screen prompts operator when programming the station. An audio program signal can added to any channel. Two programmable relays control external device.

Contact Clear-Com or authorized dealer for matrix options.

Wall Mount Speaker Stations

KB-701 Single Channel Programmable

Single-channel station with microprocessor-controlled logic and switching, featuring four different operating modes for local or remote hands-free control of speaker and mic. Wide-frequency-response speaker and integral flush-mounted condenser microphone, with internal sensitivity jumper. Momentary-only talk button. Intercom and program-level controls, with internally adjustable minimum level. Balanced program input. Audible and visual call signaling. Mounts in wall or console in a standard U.S. 4-gang box, or in optional V-Box portable enclosure.
Optional 4-wire and TW daughter boards.

KB-701

KB-702 2-Channel Flush Mount

The KB-701 remote speaker station provides one channel of party-line communications, with the ability to talk and/or listen on the selected channel. The user can listen via the integral speaker, or may use a headset or telephone-style handset – and can talk via a headset mic, a telephone handset, or a push-to-talk microphone.

Two-channel-selectable, full-duplex speaker station mounts in a U.S.-standard 4-gang electrical box for wall, console, or portable use. The microprocessor-controlled station features visual and audible call signaling, balanced program input, and standard or 4-wire and TW connection (with optional daughter board).

KB-702 GM provides the same features as KB-702, plus gooseneck microphone (GM-9/GM-18 or GN-250/GN-450) connector options, with adjustable VOX feature and mic/headset switch.

KB-702

V-Box Portable Enclosure For KB Stations

V-Box permits either angled or vertical portable/desktop mounting of the KB-702, KB-702 GM, and KB-701 speaker stations. Both male and female 3-pin XLR connectors on side panel. Rugged metal and wood construction for an attractive, durable enclosure.

V-BOX shown with KB-702

Wall Mount Headset Stations

HB-702 2-Channel

HB-702 is a selectable two-channel wall- or console-mounted headset station. Microprocessor-controlled logic and switching, with momentary/latching talk button. It fits in a U.S. standard two-gang box. Visual call signaling. Optional 4-wire and TW daughter boards.

HB-704 4-Channel

HB-704 provides the same features as MR-702 above, but select from four intercom channels. Optional TW daughter boards.

HB-702

Beltpacks

RS-601

Single channel with 3-pin female and male XLR, 4-pin male XLR headset connector, 2.5mm AUX headset connector and an RS-232 data connector. Allows use on a TW line (Audio on Channel B) without loading down channel A.

RS-601

RS-602

Dual channel with 6-pin female and male XLR, 4-pin male XLR headset connector, 2.5 mm AUX headset connector and a RS-232 connector. Allows audio program connected through pins 5 and 6 of the intercom line connector to be looped through to other RS-602/622's in a daisy chain. A separate volume control sets program level. AC and DC Call signaling on both channels.

RS-602

RS-622

Similar to the RS-602 with split-ear operations via 6-Pin male XLR headset connector. Line connection through 6-Pin female XLR. Intercom channels can be mixed into the opposite ear with V-Pack software.

RS-622

RS-601

RS-602

RS-603

Beltpacks

RS-603 (TW)

Dual channel with 3-pin female and male XLR, 4-pin male XLR headset connector, 2.5 mm AUX headset connector and an RS-232 connector. Onboard switch selects loop through connector as audio program in. Separate volume control sets program levels. RTS line compatible. AC call signaling on both channels; DC call signaling on Channel B (reversible). Channel exclusive allows use as a single channel beltpack. Requires a TWC-701 or TWC-704 (sold separately) for two-channel operation.

RS-603

RS-603R (TW)

Similar to RS-603 but with 4-Pin female XLR headset connector.

RS-603R

RS-623

Similar to RS-603 with split-ear operation via 6-Pin male XLR headset connector. Intercom channels can be mixed into the opposite ear with V-Pack software. Requires a TWC-701 or TWC-704 (sold separately) for two-channel operation.

RS-623

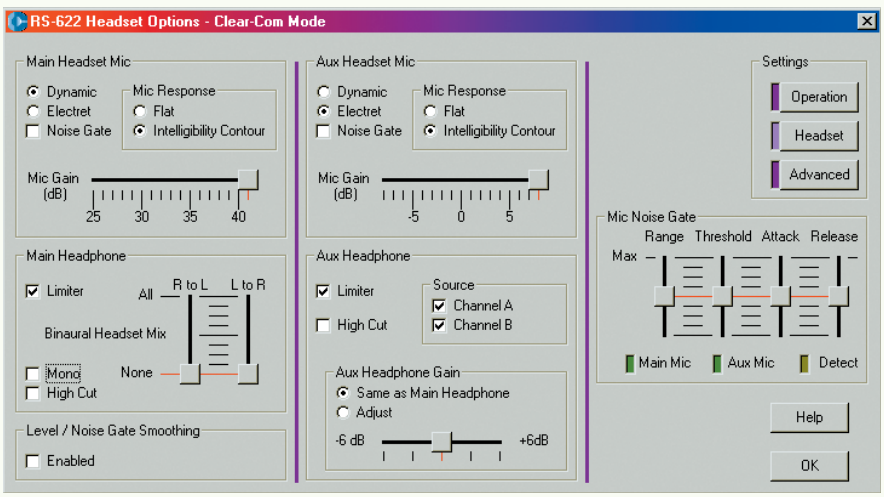
RS-623R (TW)

Similar to RS-603 with split-ear operation via 5-Pin female XLR headset connector. Intercom channels can be mixed into the opposite ear with V-Pack software. Mono compatible.

RS-623R

V-PACK Programming Software

Clear-Com V-PACK software offers the user the ability to create, store and transfer various set-up options between the beltpack and a PC. Once connected, all the onboard set-up options plus additional ones are available to select and write into a beltpack's memory.



V-PACK Screen Shot

Headsets

CC-95

Durable, professional headset with smooth, full-range audio response and great comfort. Flexible boom arm features a specially designed, noise-cancelling mic; rotate for left- or right-side use. Custom foam-filled ear cushion provides acoustic isolation in moderate-noise-level environments. 5.5-foot (1.67 meter) cord with 4-pin female XLR connector.

CC-95

CC-260

Double-ear, noise-attenuating headset with same features as CC-95. Separate wires for each earphone allow stereo or "split ear" use.

CC-260

CC-260-6

Same as CC-260 except with 6-pin connector. Use with binaural RS-622 Beltpack.

CC-95R

Same as above with 4-pin male for RTS systems.

Note: All headsets above can have their microphones wired balanced for broadcast use.

CC-40 and CC-60

Single- or double-ear general-purpose intercom headsets. 200/400 Ohms, with excellent noise attenuation. Straight 5.5-foot cord (1.67 meter) with 4-pin female XLR connector.

CC-40

CC-60

CC-25, CC-26 and CC-27

The CC-25 electret is only available with mini plug for 600 Series beltpacks.

The CC-26 is a single-ear, 300-Ohm ultra-lightweight (1.3 oz) headset with dynamic, noise-cancelling mic element on a flexible boom. Straight 5.5-foot cord (1.67 meter) with 4-pin female XLR connector.

The CC-27 is a single-ear wrap around rear worn headset with microphone. 4-pin XLR female. 200ohm Dynamic noise cancellation microphone with 150Hz to 10KHz frequency response.

CC-25

CC-27

CC-26

Handsets

PT-7 Hand-held mic

Rugged, push-to-talk, hand-held microphone with mounting clip. 5-foot coil cord with 4-pin female XLR connector.

PT-7

HS-6 Telephone-style handset

Telephone-style handset with wall/console mount hanger, push-to-talk switch. 6-foot coil cord with 4-pin female XLR connector.

HS-6

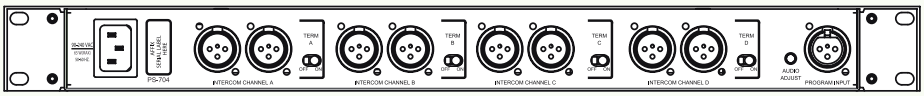
Power Supplies

PS-704 4-channel power supply

2-amp single-rack-space intercom power supply provides system power, line termination, and program feed for one-to four-channel systems.

One line-level program input with selectable channel assignment and individual level controls.

PS-704



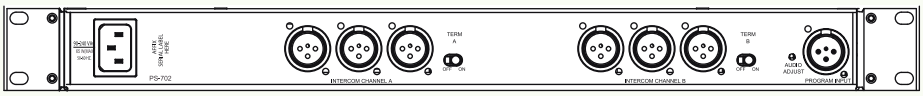
PS-704 Rear Panel

Power "short" LED indicators for each channel. In the event of short circuit or current overload on an intercom channel, protection circuitry shuts down that output. When the fault condition is removed, ASR "auto-reset" circuitry automatically restores system power. Will support up to 60 beltpacks or 20 speaker stations. When two or more PS-464's are connected together, "intelligent" power sensing lets system reset itself in the event of DC short or loss of AC power, no matter how large the system.

PS-702 2-channel power supply

The PS-232 is a two-channel, 1-amp continuous (2-amp maximum) intercom power supply in a 1-RU chassis. The unit will power up to 40 intercom beltpacks or 15 speaker stations, even under the most demanding conditions.

PS-702



PS-702 Rear Panel

A custom-programmed microprocessor controls the PS-232, allowing it to run cooler, differentiate and react to shorts and overload conditions, display any fault conditions in the intercom line, and recover very quickly even under a full load. The PS-232 also offers switchable termination, three parallel XLR connectors per channel, an adjustable program input assignable to either or both channels, a convenient front-panel intercom connection assignable to either channel, and a built-in test tone generator.

PK-7 Power Supply

A small, economical, lightweight power supply designed for powering small systems. Housed in a rugged, all metal case, it features short-circuit protection with automatic recovery and full voltage regulation to 400mA. Three output connectors provide convenient interconnection to the beltpacks. Will support 10 beltpacks or 3 speaker stations. UL listed external power supply module included.

PK-7/220 version available

PK-7

Program Interrupt (IFB)

IFB Program Interrupt

The Clear-Com IFB system sends one of two program audio signals to individual Talent Receivers via standard, two-conductor shielded mic cables.

This system allows Talent coordinators to interrupt the program and cue talent. Tally lights indicate IFB channels in use.

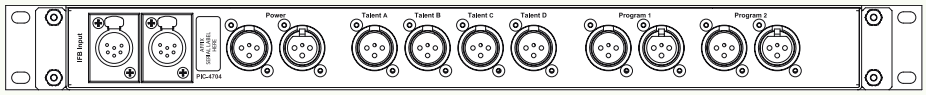
The system can be controlled with a dedicated IFBControl Panel, or via an MS-812A station with optional IFB modules. It features practically unlimited expansion capabilities (up to 96 talent channels and 50 control locations). IFB components are powered by a Clear-Com power supply.

PIC-4704 Program Interrupt Controller

Each IFB Controller handles up to four Talent Receivers. For use with MA-704 and AX-704 IFB Control Panels or intercom stations. This unit contains the circuitry for selecting one of two program sources, sending the program to the IFB channels, and interrupting it via the Talent Control Station. Variable audio program dip-level. Monaural or stereo/ split-feed outputs. Improved and intuitive user interface.

* Requires a 6-pin XLR cable for connection to MA-704/AX-704 control panels.

PIC-4704



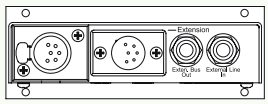
PIC-4704 Rear Panel

MA-704/AX-704 IFB control panel with mic connector

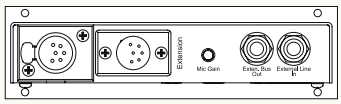
These console-mount or rackmount units control "program interrupt" (IFB) to the talent. The MA-704 includes a gooseneck microphone connector, illuminated "All Talent", and 4 individual talent push buttons. The AX-704 permits expansion in multiples of 4. Both accept the "hot mic out" from a Clear-Com station.

AX-704

MA-704



AX-704 Rear Panel



MA-704 Rear Panel

TR-50 Talent Receiver

An amplified single-channel talent beltpack with volume control. It connects to the Program Interrupt controller with standard microphone cable. Mini earphone jack output. Includes talent earset.

TR-50

Que-COM

SMQ-1 Single-ear headset intercom station
DMQ-2 Double-ear headset intercom station

Que-Com is a high-performance, economical party-line communications system. It is ideal for audio/visual, educational, theatrical, video production, and sports applications. Que-Com also performs exceptionally well in noisy industrial and concert performance environments. This system features a wide frequency response and high audio output. Rugged, all-metal diecast beltpack with belt clip. The intercom provides an individual volume control and mic on/off switch for each station with a permanently attached, rugged, noise-isolating headset. Interconnects with standard mic cable. Que-Com is compatible with all Clear-Com systems. Available with single and double-ear headsets.

Que-COM

PK-7 Lightweight power supply

The PK-7 power supply will support up to 30 Que-Com headset stations. It is line and load regulated and short-circuit protected. UL-listed external power supply module included.

PK-7

On-Air

AB-700 Announcer's Console

The On-Air Announcer's Console is a compact desktop unit designed specifically for sports, live event broadcasting, and voice-over work. The ultimate broadcast-quality tool for announcers and commentators, the AB-700 integrates all of the inputs, outputs, and controls necessary at the announce position, including intercom "Talkback," IFB receiver, and a silent "Mute" button that provides noise-free cough and "mic on/off" switching. Extremely flexible, the console is easily configured for practically any combination of audio sources, microphones, headsets, or intercom systems, ensuring quality audio and powerful communications. New and improved ease of operation. Mic pre-amp adjustment, LED level indicators, headset reverse, two talkback options, 6 or 3 pin mic input.

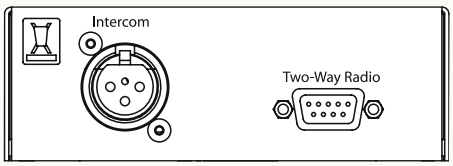
AB-700

Interfaces

TW-47 2-way radio/walkie-talkie interface

Compatible with both Clear-Com and RTS®, this versatile interface connects virtually any walkie-talkie to the party-line intercom, using one walkie-talkie as a base station. A person on a remote walkie-talkie can then converse seamlessly with anyone on the wired intercom system. The base-station radio is keyed from the intercom call signal. Extensive RF and EMI isolation prevents interference from entering the intercom system. Separate transmit and receive level controls are provided, along with audio level and transmitter keying indicators. The stand-alone interface is powered by the intercom line.

TW-47



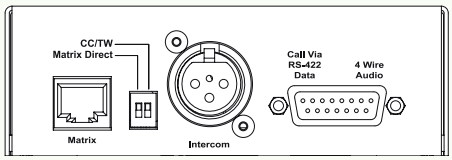
TW-47 Rear Panel

EF-701M Interface

The EF-701M interface connects one channel of standard or TW party line intercom to four-wire audio, and simultaneously converts either the DC-voltage call signal or 20kHz call signal to RS-422 data (and back). The resulting four-wire audio plus RS-422 data can then be sent to a fiber-optic converter (modem) or transmitted over twisted-pair cable such as CAT-5.

The EF-701M offers a quick and simple set-up. Once the signal is converted to four-wire and sent through the chosen transmission medium, it is converted back to two-wire mode with another EF EF-701M and connected to the party-line system or station at the other end of the line.

The unit may also be used as a high-quality stand-alone two-to-four-wire converter. Its excellent hybrid null and wide-range level controls further enhance its flexibility. It can easily be mounted on a utility rack shelf; up to three units will fit across a standard 1-RU rack space. No additional power connection is required, as the EF-701M is powered by the intercom line.

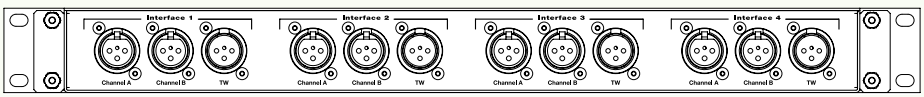


EF-701M Rear Panel

TWC-701/TWC-704

The TWC-701 2-channel cable adapter combines two intercom channels on to a single 3-pin XLR cable. All two-wire (TW) beltpack models require this adaptor to support a two channel connection to a multi-channel Clear-Com system.
The TWC-704 provides four TWC circuits in 1RU. Each TWC-701 and TWC-704 module can drive up to fifteen RS-603 series beltpacks.

TWC-704



TWC-704 Rear Panel

Interfaces

TW-12C System Interface

Connects one intercom system to another. Opto-isolation eliminates hums and buzzes. Compensates for level and impedance differences between systems. Allows Clear-Com-to-Clear-Com, Clear-Com-to-RTS, and RTS-to-RTS system configurations. Powered by the connected intercom system. Translates "call" signals in both directions.

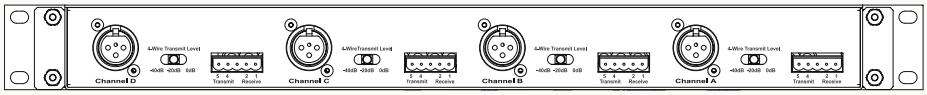
TW-12C

TW=12C Rear Panel

IF4W4 4-wire interface

Four channel interface - connects Clear-Com to TV cameras, two-way radios, satellite links, and other communications devices through either their headset jacks or 4-wire circuits. Has selective party-line capability. Features individual transmit, receive, and null controls, as well as transmitlevel indicators. Switchable mic- or line-level output for compatibility. The built-in test jack and test tone provide quick nulling.

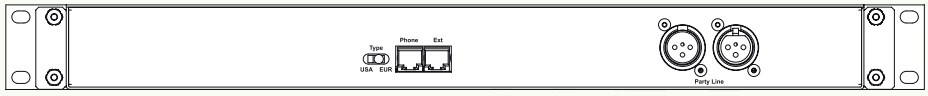
IF4W4



IF4W4 Rear Panel

AC-701 Telephone and 2-wire interface

Transformer-isolated unit connects a Clear-Com system to any other 2-, 3-, or 4-wire system or to telephone lines. Ideal for connecting telephone lines to Clear-Com. Built-in test tones and balancing controls for fast, easy setup. Individual transmit and receive gain controls.



AC-701 Rear Panel

Accessories

FL-7 Call Signal Flasher

New LED design with dimmer. Connects to any Clear-Com or compatible intercom system, providing both a visual and audible indication of a call signal on the intercom channel. Brightamber LED attracts attention of the operator. Front-panel mode switch selects flasher, ring, or both. May be connected anywhere on the intercom line with standard mic cable. For portable use or permanent installation.

GM-9/GM-18 Gooseneck Mics

The GM-9 and GM-18 gooseneck microphones are designed for use with Clear-Com intercom stations. They feature a gold-plated, threaded, locking 3-conductor quarter-inch phone plug connector for secure connection to the intercom station. The sleeve and ring are electrically isolated. The microphones are available in 9" or 18" lengths, mounted on a durable, flexible gooseneck. A fitted windscreen is included. The uni-directional electret condenser mic element has a side and rear rejection of greater than 6 dB between 100 Hz and 10 kHz. The GM-9 and GM-18 are the recommended microphones for use with Clear-Com intercom stations.

GN-250/GN-450 Gooseneck Mics

GN-250

25 cm/10" Plug-in gooseneck microphone (for I-Stations only)

GN-450

45 cm/18" Plug-in gooseneck microphone (for I-Stations only)

SP-3 Line Splitter

A one-female-input to three-male-output cable assembly for intercom line splitting.

Accessories

WP-2 Intercom Outlet Wall Plate

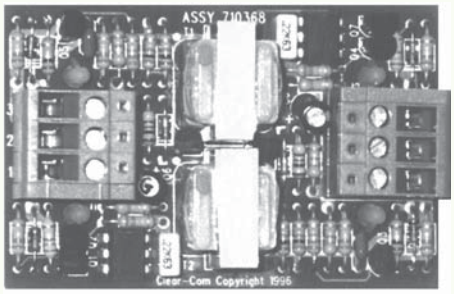
Selectable two-channel wall plate connects to single-channel beltpacks such as the RS-501. 3-pin male XLR connector with two-position channel-selector switch, allowing user to talk on either of two intercom channels. Mounts in standard single-gang electrical box.

WP-6 Intercom Outlet Wall Plate

Wall plate for use with two-channel beltpacks such as the RS-502 and RS-522. 6-pin male XLR connector connects user with two intercom channels. Mounts in standard single-gang electrical box.

MT-1 Isolator Circuit Card

Electrically isolates the ground, power, and signaling when connecting between two party-line intercom systems. Use one card per channel.



YC-36 "Y" Adapter

Plugs into the 6-pin male XLR intercom connector on a RS-602 or RS-622 beltpack. The other end provides two 3-pin female XLR connectors, for separate line connection to channels A and B.

YC-66 6-Pin Line Splitter

One 6-pin male XLR connector splits into two 6-pin female connectors.

Interconnect Cables with Installed Connectors

3-pin and 6-pin XLR cables are available in 25', 50', and 100' lengths.

2 Channel Main/Remote Stations

	CS-702	MS-702	RM-702
Power Supply	Source: AC Power Line Voltage 90-240 VAC 50-60 Hz Power In 60 VA Max. 30 VDC Intercom Power out 1.2 A Continuous 2A Peak (Do not exceed the 1.2 A rating for more than 2 seconds per 1 minute period.	Source: AC Power Line Voltage 90-240 VAC 50-60 Hz Power In 60 VA Max. 30 VDC Intercom Power out 1.2 A Continuous 2A Peak (Do not exceed the 1.2 A rating for more than 2 seconds per 1 minute period.	–
Power Requirement	–	–	100 mA avg
Dimensions	3.0"H x 8.125" W x 10"D (76 x 206 x 254mm)	1.75"H x 19" W x 6.5"D (44 x 483 x 165mm)	1.75"H x 19" W x 6.5"D (44 x 483 x 165mm)
Weight	5.2 lbs. (2.3 kg)	5.0 lbs. (2.75 kg)	3.3 lbs. (1.5 kg)
Certification	CE UL LISTED	CE UL LISTED	CE

4-Channel Main/Remote Stations

	MS-704	RM-704	SB-704
Power Supply	Source: AC Power Line Voltage 90-240 VAC 50-60 Hz Power In 60 VA Max. 30 VDC Intercom Power out 1.2 A Continuous 2A Peak (Do not exceed the 1.2 A rating for more than 2 seconds per 1 minute period.	–	Source: AC Power Line Voltage 90-240 VAC 50-60 Hz Power In 60 VA Max. 30 VDC Intercom Power out 1.2 A Continuous 2A Peak (Do not exceed the 1.2 A rating for more than 2 seconds per 1 minute period.
Power Requirement	–	100 mA avg	–
Dimensions	3.5"H x 19" W x 10"D (89 x 483 x 254mm)	3.5"H x 19" W x 9"D (89 x 483 x 229mm)	3.5"H x 19" W x 10"D (89 x 483 x 254mm)
Weight	10.5 lbs. (4.8 kg)	6.3 lbs. (2.9 kg)	10.5 lbs. (4.8 kg)
Certification	CE UL LISTED	CE	UL LISTED

12-Channel Master Station

	MS-812A - 12-Channel Master Station
Power Requirement	115/230 VAC, 50/60 Hz, 30 VA – Requires connection to powered Clear-Com
Dimensions	3.5"H x 19" W x 10"D (89 x 483 x 254mm)
Weight	12 lbs. (5.5 kg)

Amplified Monitor Speaker

	AMS-1027
Frequency Response	60 Hz – 16 kHz, 6 dB
Power Amp Output	5 watts L/R band avg. ; 10 watts woofer avg.
Power Supply	Universal AC input (100-240V)
Dimensions	1.75"H x 19" W x 9"D (44 x 483 x 304mm)
Weight	6.8 lbs. (3.1 kg)

Programmable Source Assignment Panel

	RCS-2700
Power Requirement	30 VDC +/- 10% (27 to 33 VDC), 80 mA maximum – 40 mA avg per unit
Dimensions	3.5"H x 19" W x 10.75"D (8.9 x 48.3 x 27.31cm)
Weight	5.5 lbs. (2.5 kg)
Certification	CE

Wall Mount Speaker Stations

	KB Series: KB-701/KB-702/KB-702GM
Power Requirement	Voltage: 30 VDC standard unit; 16-18 VAC with 4-wire option module – Current: 100 mA, avg
Dimensions	4.5" H x 8.25"W x 1.75"D (114 x 210 x 44mm)
Weight	KB-702/KB-702GM: 1.22 lbs. (0.56kg) – KB-212: 1.04 lbs. (0.56kg)
Certification	CE

Product Specification Index

Headset Stations

	HB Series: HB-702/HB-704
Power Requirement	Voltage: 30 VDC standard unit; 16-18 VAC with 4-wire option module – Current: 30 mA, avg
Dimensions	4.5" H x 4.625"W x 1.75"D (114 x 117 x 44mm)
Weight	0.52 lbs. (0.23 kg)
Certification	**CE**

600 Series Beltpacks

	600 Series: RS-601/RS-602/622/603/623
Dimensions	All Models 4.68" H x 3.73"W x 1.34"D (1116 x 95 x 34mm)
Weight	**RS-601:** 7.3 oz (0.20 kg) **RS-602/622/603/623/R:** 7.8 oz (0.22 kg)

Power Supplies

	PS-704	PS-232	PK-7
Power Supply	Source: AC Power Line Voltage 90-240 VAC 50-60 Hz Power In 60 VA Max. 30 VDC Intercom Power out 1.2 A Continuous 2A Peak (Do not exceed the 1.2 A rating for more than 2 seconds per 1 minute period.	Source: AC Power Line Voltage 90-240 VAC 50-60 Hz Power In 60 VA Max. 30 VDC Intercom Power out 1.2 A Continuous 2A Peak (Do not exceed the 1.2 A rating for more than 2 seconds per 1 minute period.	400 mA at 30 VDC
Dimensions	1.75"H x 19" W x 6.5"D (44 x 483 x 165mm)	1.75"H x 19" W x 5.25"D (44 x 483 x 133mm)	1.6"H x 2.75" W x 4.9"D (41 x 70 x 124mm)
Weight	4.5 lbs. (2.05 kg)	4.5 lbs. (2.05 kg)	1.5 lbs. (0.68 kg)
Certification	**CE** UL LISTED	**CE** UL LISTED	**CE**

Program Interrupt (IFB)

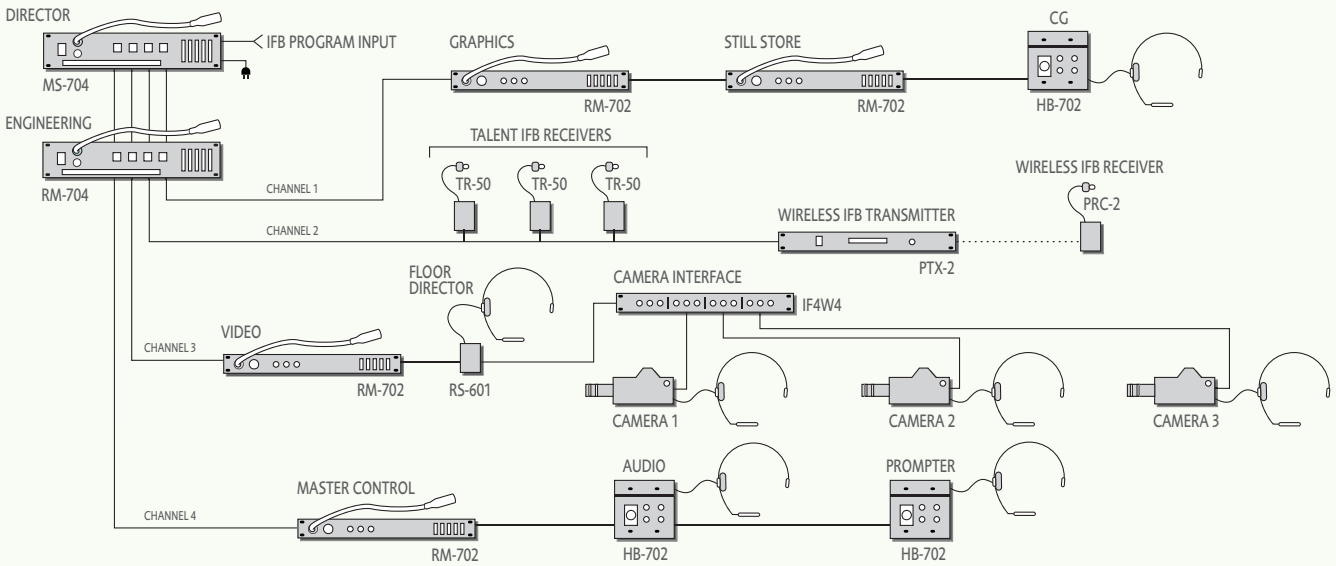
	PIC-4704	MA-704/AX-704	TR-50
Power	60 mA, max	**MA-704**: 180 mA, max **AX-704**: 150 mA, max	10 mA, avg
Dimensions	1.75"H x 19" W x 9"D (44 x 483 x 255mm)	**MA-704**: 1.75"H x 6.3" W x 6.5"D (44 x 158 x 163mm) **AX-704**: 1.75"H x 4.9" W x 6.6"D (45 x 125 x 168mm)	1.5"H x 1.5" W x 3.6"D (38 x 38 x 91mm)
Weight	3.6 lbs. (1.6 kg)	**MA-704**: 1.8 lbs (0.83kg) **AX-704**: 1 lbs (0.45 kg)	4.5 oz (0.13 kg)
Certification	**CE**	**CE**	

Interfaces

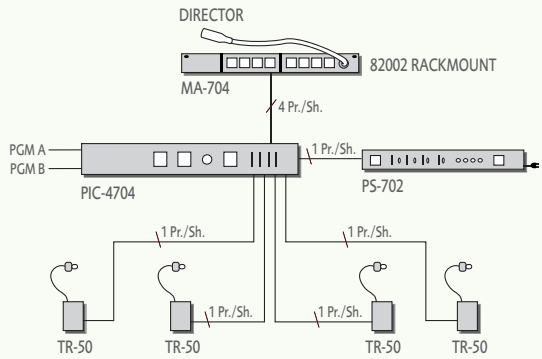
	TW-47	EF-701M	AC-701	TW-12C	IF4W4
Power Requirements	25 mA, max	60 mA, max	18 mA	50 mA, max	50 mA per module
Dimensions	1.575" H x 3.75" W x 5.8"D (40 x 95 x 147mm)	1.75"H x 19" W x 9"D (44 x 483 x 255mm)	1.75"H x 19" W x 6"D (44 x 483 x 152mm)	1.75"H x 19" W x 6"D (44 x 483 x 152mm)	1.75"H x 19" W x 6.8"D (44 x 483 x 173mm)
Weight	1.1 lbs (0.5 kg)	3.6 lbs. (1.6 kg)	2 lbs (0.91 kg)	2.75 lbs (1.25 kg)	3.25 lbs (1.48 kg)
Audio Levels	–	Transmit & Receive: Adjustable ~15 kBV to +4 kBV	–	–	–
Frequency Response	–	–	200 Hz -12 kHz	–	–
Certification	**CE**				**CE**

TV Broadcast Station

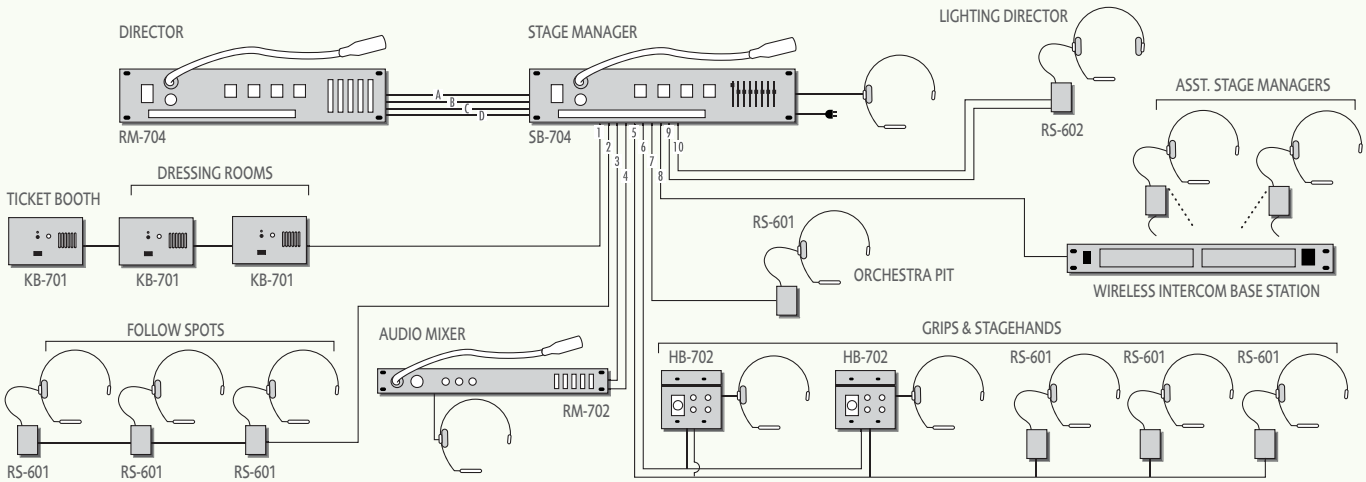
4-Channel TV News System



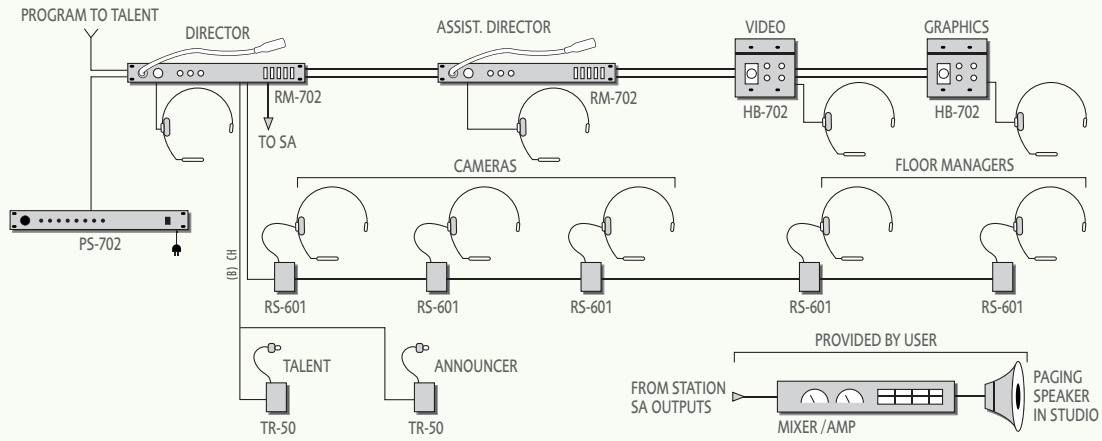
Stand-Alone System, 1 Location, 4 Talent



4-Channel System Using SwitchBoard Main Station

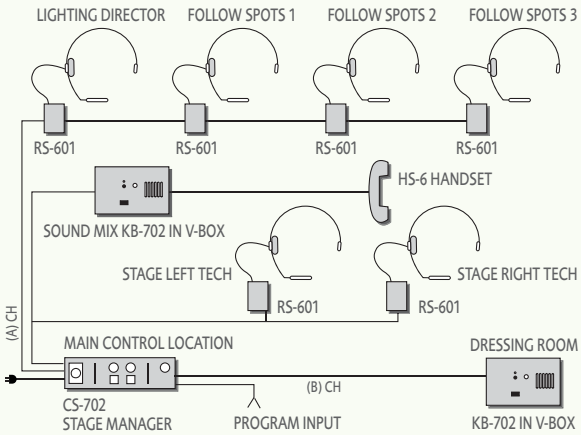


Cable/School Television Studio

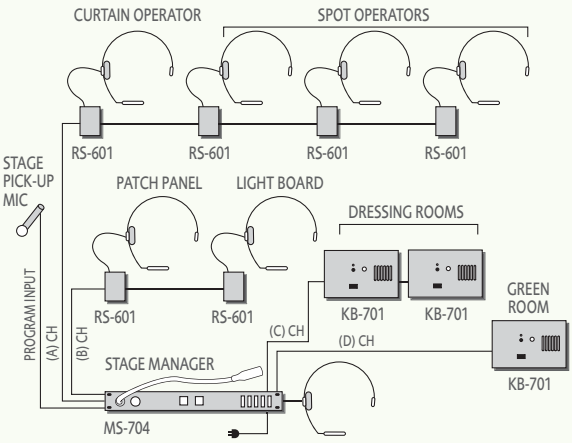


Stage Production

Typical Portable System

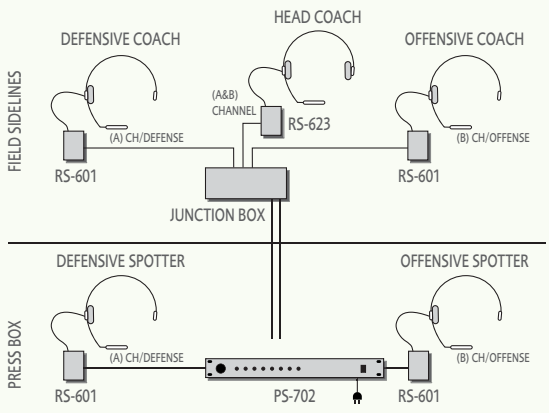


Theater



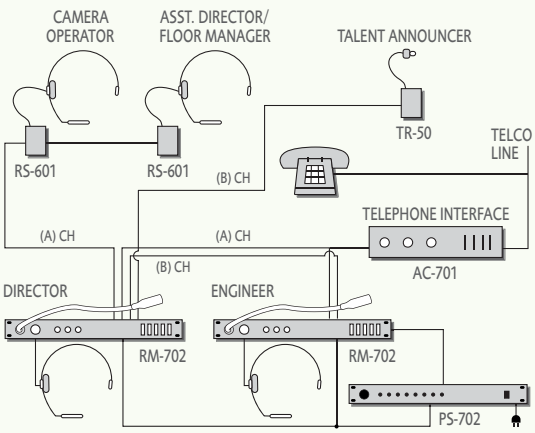
Sports Production

Coach to Spotter System-Portable



OB Truck

ENG/EFP Truck



2-Channel Main/Remote Stations

MS-702

RM-702

4-Channel Main/Remote Stations

MS-704

RM-704

SB-704

Programmable Source Assignment Panel

RCS-2700 + RCU-67

Wall Mount Speaker Stations

KB-702

KB-701

V-BOX shown with KB-702

HB-702

Belt Packs

RS-601 RS-602 RS-603

Headsets

CC-95

CC-260

CC-40

CC-60

CC-25

CC-26

Handsets

PT-7

HS-6

Power Supplies

PS-704

PS-702

PK-7

Program Interrupt (IFB)

PIC-4704

TR-50

AX-704

MA-704

Que-COM

Que-COM

AB-700

Interfaces

TW-47

TW-12C

IF4W2/IF4W4

Accessories

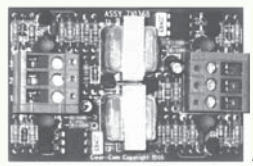
FL-7

SP-3

GM-9/GM-18

WP-2

WP-6



MT-1

YC-36

YC-66

Digital Matrix Intercom Technology

Clear-Com Eclipse digital matrix technology is a highly reliable, flexible and scalable foundation for user-to-user and group based multi-connections. The Eclipse product family provides a broad range of powerful matrix frames, user panels and interfaces to support basic to complex intercom requirements, including connectors to Clear-Com party-Line (using the CCI-22). **Eclipse PiCo** is a highly functional and compact 36-port matrix frame for small to medium size venues or studios. Facilities with a more expanded communication need or are limited in rack space may consider the mid-size **Eclipse Median** that combines a 112-port frame with built-in interface slots. The largest matrix is the **Eclipse Omega**, providing a 240-port matrix frame for large facilities with high quantity of users located in either one or multiple sites.

Eclipse Omega

Eclipse PiCo

Furthermore, Clear-Com offers the entry-level **Easi-PiCo** solution, a preconfigured matrix package which comes with a scaled-down 16-port Eclipse PiCo frame, interfaces, power supply and a choice of beltpacks and panel options.

Wireless Intercom Solutions

Clear-Com carries the broadest range of wireless intercom selections on the market to address the ever-increasing needs for wireless mobile communication in large production venues. All Clear-Com wireless offerings are full-duplex, enabling beltpack users to talk and listen simultaneously. Each beltpack provides users with the flexibility of one-to-one or group communication. Available as standalone systems or linked with traditional wired intercom systems such as party-line or matrix systems, these solutions allow operators to "cut the cord", offering unrestricted mobility and unparalleled ease of communication.

Clear-Com includes the following wireless offerings: **CellCom®/FreeSpeak®** – License-free digital transmission wireless intercom that provides wireless beltpack connections seamlessly in a large coverage area. CellCom®, trademarked in the US, operates in 1.921- 1.928 GHz range; FreeSpeak®, for all non-US markets, operates in 1.881- 1.916 GHz range.

Tempest 2400 & Tempest 900

CellCom®/FreeSpeak®

Tempest® 2400 & Tempest® 900

One- to four- channel digital wireless intercom systems that operate in either 2.4 GHz or the 900 MHz band. Tempest can operate up to 5 wireless beltpacks per base station and up to 75 users on 15 base stations. **WBS** – WBS-670 (single channel) or WBS-680 (two channel) analogue wireless intercom systems operates in frequency bands between 518-740 MHz, ideal for crowded venues with potential frequency or environmental challenges.

IP Communications

Clear-Com offers the most advanced solutions to link matrices to matrices and matrix to panels over large distances. The **VoICE 2.0** IP interface takes advantage of Internet Protocol and leverages the growing availability of VPN and the Internet to lower operating costs for wide area linked matrices. **SOFT-VoICE**, a virtual panel application on your PC, connects back to VoICE 2.0 to provide IP based remote panel connections to the home matrix.

VoICE 2.0

SOFT-VoICE Screenshot

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